DOCUMENT RESUME

ED 157 332 EC 111 817

AUTHOR Parelius, Allen M.
TITLE Monitoring-Evaluation System.
PUB DATE Jun 78
NOTE 11p.; Paper presented at the World Congress on Future Special Education (First, Stirling, Scotland, June 25 - July 1, 1978)

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS *Computer Science; Elementary Secondary Education; *Handicapped Children; *Individualized Programs; Program Evaluation; Program Planning
IDENTIFIERS Education for All Handicapped Children Act

ABSTRACT

The paper discusses a procedure for writing, monitoring, and evaluating Individual Education Plans (IEPs), as mandated by the Education for All Handicapped Children Act, utilizing computer technology. Concerns related to the values and philosophy of decision-makers as they work with data derived from computer systems to formulate IEPs are also considered. (Author/SBH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

1.4 #15

JUL 24 1978

ED157332

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Monitoring-Evaluation System

Allen M. Parelius
Associate Professor of Education
Indiana University at South Bend
1700 Mishawaka Avenue
South Bend, Indiana 46615
(219)237-4483/291-8981

©

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

C.E.C.

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

EC111 817

Monitoring-Evaluation System

Allen M. Parelius

Indiana University at South Bend

The Education For All Handicapped Children Act of 1975 specifies that all handicapped pupils shall (a) be provided an appropriate instructional program to meet their unique needs in, (b) a least restrictive environment. These two requirements must be clearly delineated in a written Individual Education Plan (IEP). A procedure for writing, monitoring, and evaluating IEP's utilizing computer technology to free teachers from the drudgery and time-consuming aspects of the tasks are discussed. Concerns related to the values and philosophy of decision-makers as they work with the data derived from computer systems to formulate IEP's are also considered.

> The attempt to avoid ancient orthodoxies has led to the myth of a value - free education. We now find millions of young people moving through the educational...[system] who have never once been encouraged to question their own personal values or to make them explicit. In face of a rapidly shifting, choice-filled environment, one which demands decision after adaptive decision from the individual, this neglect of value questioning is crippling. (Toffler, 1974, p.18)

Described in this article is a computer system known as Educational Services: Diagnostic-Evaluation-Management (ESDEM) that provides a means whereby relevant instructional data can be routinely collected and analyzed to assist educational decision-makers (i.e., teachers, parents, pupils, and administrators) proceed in their problem-solving roles more efficiently and hopefully, more effectively.

However, in the interpretation of data, decision-makers should be sensitized to the fact that a <u>value</u> must be placed on, and a <u>judgment</u> made concerning the relevance of whatever data we choose (value) to collect -- specifically as it effects the educational opportunities and thus the future lives of pupils for whom we write Individual Education Plans (IEP's).

The future orientation of this article lies not merely in the argument to either adopt or adapt the ESDEM system in

the educational environment, but derives from the knowledge that decision-makers need to take the responsibility to identify a personal, consistent set of values and mold a philosophy of special education that fully addresses the time honored questions of what is good (axiology), true (epistemology), and real (ontology) as they relate to our goals of special education for each unique handicapped pupil.

Not withstanding small variations in State laws to the contrary, special educators in the United States are being pressured into a massive reordering of educational priorities demanded through the federal legislative process. Under the provisions of the Education For All Handicapped Children Act (Public Law 94-142), special education teachers will be faced with two tasks that will make their role more vulnerable to public scrutiny. The law specifies that all handicapped pupils shall (a) be provided with an appropriate instructional program to meet their unique needs in (b) a least restrictive environment.

To meet the requirement of providing appropriate instruction to meet the unique needs of the handicapped pupil, teachers will have to plan, develop, implement, monitor, and evaluate the effectiveness of short and long term instructional objectives based upon a written IEP for each pupil. Although there is no required method for writing IEP's, it can be stated confidently that they are quite comprehensive and often consume three or more pages per pupil. The sheer bulk of these IEP's is creating an avalanche of unmanageable paperwork

for teachers that, unless modified, will make the process of writing, monitoring, and evaluating IEP's impossible. An alternative process suggested by Parelius (1977) is that computer technology be used to simplify problem-solving activities and facilitate fast accurate communications in the areas of program planning, instructional monitoring, and evaluation.

During the last ten years, the development of computer technology has been phenomenal. As reported in journals, such as Educational Technology and the Journal of Personalized Instruction, the use of computer technology in the field of education has many and varied applications. With the increasing popularity of the education accountability movement, along with the passage of the Education For All Handicapped Children Act of 1975, educators will need to find new ways to plan, implement, monitor, and evaluate the effectiveness of IEP's and to publicly report educational outcomes on an annual basis. Fortunately, computer technology is available as a tool to assist in efficiently carrying out the functions of educational accountability via the IEP process.

There are seven basic advantages for using computer technology for assisting in the management and evaluation of IEP's:

1. The computer offers a means whereby the teacher or administrator can communicate to pupils or parents in a number of formats quickly and efficiently.

2. All formats require only one standard form for message preparation (coding) that is non-technical and easily learned.

3. All communications can be stored for future retreival.

4. All communications can be recalled in a variety of formats to aid in decision-making.

5. Teachers and administrators have maximal flexibility in writing IEP's for pupils without having to purchase pre-packaged instructional programs or sets of instructional objectives.

6. Teachers receive printed IEP objectives in outline format that they may use as aids for instructional monitoring and evaluation, in addition to summarizing pupil progress for conferences with parents and others.

7. All of these advantages are time-efficient and cost-effective, allowing teachers to concentrate a larger percentage of their time on the individual instructional process.

Briefly described below are examples of each of the seven previously cited advantages of computer technology that are presently being used in nearly one-hundred school districts in the United States and Canada to aid in writing, monitoring, and evaluating IEP's for handicapped pupils. The basic format of communication for the computer system referred to as ESDEM is hard-copy print. This format was selected because of the constant need of teachers to have a permanent record of pupil progress available in the classroom. The standard procedure for message preparation in ESDEM is based on the use of comprehensive subject-area taxonomies in fifteen fields of study

on a grade continuum from pre-school through post-high school. Teachers use these taxonomies to decide which objectives are most applicable for each pupil. Once objectives are chosen and coded, they are keypunched and then printed by the computer in report card format for each pupil.

Every teacher has complete freedom to select or write-in their own objectives which are most realistic for each pupil. The number of objectives chosen depends on teacher judgment as does the length of time the objectives will be targets for instruction. Learning to use the taxonomies and the proper coding procedures can be learned in a single morning workshop session. Once objectives have been selected and coded, they remain in the pupil's IEP until the teacher elects to have them deleted. However, by leaving all objectives in the IEP, teachers will be able to have (a) a cumulative record of instructional objectives completed and/or in progress for each pupil, (b) a report-card like record of pupil progress to share with pupils, parents or administrators, and (c) a record of all objectives that at designated times during the school year can be computer analyzed and printed in a wide variety of report formats for home, school, or State/federal reporting purposes. The numerous computer print-outs available to teachers, provide easy-to-read reports of each pupil's progress as aids in the instructional monitoring, evaluating, and decision-making process.

The greatest advantage of ESDEM is, however, that instructional objectives, monitoring charts, formative and summative

evaluation reports, and records of pupil achievement are printed by the computer and not by teachers, thereby saving teachers a tremendous amount of time that can be redirected towards the individual instruction of pupils. As an example of the time savings possible using this system, a teacher could, after learning how to use the taxonomies and the coding of objectives, write all the beginning instructional objectives for a pupil in approximately fifteen minutes. To write IEP's long-hand would take considerably longer and would not be in a format easily used in the day-to-day instruction of pupils.

In summary, the ESDEM approach to writing, monitoring, and evaluating IEP's through the use of computer technology is but one of several systems that have been developed and are ready for adoption or adaption. Educators, faced with increasing public demands to be accountable for the education of <u>all</u> pupils, will need to provide appropriate instruction in a least restrictive environment based upon the unique needs of each pupil. To accomplish these goals, educators will not be able to rely on old inefficient instructional planning procedures but will need to turn to the use of computer technology to assist them in making critical instructional decisions while increasing the amount of instructional time available. Computer technology has developed to a degree where all the tasks mentioned in this paper can be accomplished efficiently in schools. What remains beyond the capacity of computer systems, is for teacher <u>attitudes</u> to change so

that there is an acceptance of this technology as a tool to be used in the instructional process for all handicapped pupils.

References

Bennis, W.G., Benne, K.D., & Chin, R. The planning of change. New York: Holt, Rinehart, and Winston, 1969.

Caster, J. Share our specialty: what is mainstreaming? Exceptional Children, 1975, 42, 174.

Martin, E.W. Some thoughts on mainstreaming. Exceptional Children, 1974, 41, 150-153.

Parelius, A.M. Educational accountability management systems. South Bend, Indiana: Indiana University at South Bend, 1975.

Parelius, A.M. Accountability in special education. Paper presented at the 55th International Convention of the Council for Exceptional Children, Atlanta, Georgia, 1977.

Toffler, A. The psychology of the future. In A. Toffler (Ed.), Learning for tomorrow: the role of the future in education. New York: Vintage, 1974, 18.